CERTI-VEX PENSEAL 244-100%

SECTION I - GENERAL INFORMATION

PRODUCT IDENTIFICATION:
CERTI-VEX PENSEAL 244 100%

VOC CONTENT: <250 GR/L OR < 2.09 #/GAL
CATEGORY: WATERPROOFING CONCRETE/MASONRY SEALER
COMMON NAME: SILANE WATERPROOFER
MANUFACTURER: VEXCON CHEMICALS, INC
ADDRESS: 7240 STATE RD, PHILADELPHIA, PA 19135
EMERGENCY NO: 800.858.2828 (PolySat Inc)
TELEPHONE NO: 215.332.7709 (Vexcon)
CHEMTREC NO: 800.424.9300 (CCN# 23822)
PREPARED: AUGUST 1997
UPDATED: MAY 2017
PREPARED BY: DARRYL F. MANUEL, PRESIDENT

SECTION II - HAZARD IDENTIFICATION

CLASSIFICATION OF MIXTURE
SKIN CORROSION/IRRITATION - CATEGORY 2
SERIOUS EYE DAMAGE/EYE IRRITATION – CATEGORY 2B
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE (NARCOTIC EFFECTS) – CATEGORY 2

CLASSIFICATION OF SOLUTION
SKIN CORROSION/IRRITATION - CATEGORY 1
SERIOUS EYE DAMAGE/EYE IRRITATION – CATEGORY 1
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE (NARCOTIC EFFECTS) – CATEGORY 1

CLASSIFICATION OF MIXTURE
SKIN CORROSION/IRRITATION - CATEGORY 2
SERIOUS EYE DAMAGE/EYE IRRITATION – CATEGORY 2B
SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE (NARCOTIC EFFECTS) – CATEGORY 2

SIGNAL WORD: WARNING
HAZARD STATEMENT: CAUSES SKIN IRRITATION CAUSES SERIOUS EYE IRRITATION.
PRECAUTIONARY STATEMENTS: USE ONLY WITH ADEQUATE VENTILATION: IF SWALLOWED, DO NOT INDUCE VOMITING: USE OF SOLVENT RESISTANT GLOVES, GOGGLES AND OTHER PROTECTIVE EQUIPMENT IS ADVISED WHEN HANDLING THIS PRODUCT: ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL: USE OF RESPIRATORS IS ADVISED WHEN USING PRODUCT IN CONFINED AREA.

SECTION III HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENTS</th>
<th>CAS NO.</th>
<th>%</th>
<th>HAZARD DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCTYLTRETHOXYSiLANE</td>
<td>2943-75-1</td>
<td>90-100%</td>
<td>NONE</td>
</tr>
<tr>
<td>RELATED SILOXANES AND SILOXANE ESTERS</td>
<td></td>
<td>1-10</td>
<td>NOT ESTABLISHED</td>
</tr>
<tr>
<td>ETHYL ALCOHOL</td>
<td>64-17-6</td>
<td>&lt;1%</td>
<td>OSHA PEL 1000 ppm TWA ACGIH TLV 1000 ppm TWA</td>
</tr>
</tbody>
</table>

Ethyl alcohol is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL and ACGIH TLV: TWA 1000 ppm.
SECTION V FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:

EXCLUDE AIR. FIRES INVOLVING THIS PRODUCT MAY BE CONTROLLED BY REGULAR FOAM, CARBON DIOXIDE, DRY CHEMICALS OR WATER SPRAY. WATER MAY BE USED TO REDUCE THE RATE OF BURNING AND FOR COOLING PURPOSES. AVOID SPRAYING WATER DIRECTLY INTO STORAGE CONTAINERS DUE TO DANGER OF BOIL OVER.

COMBUSTIBLE LIQUID - CAN FORM COMBUSTIBLE MIXTURES AT TEMPERATURES AT OR ABOVE THE FLASH POINT. STATIC DISCHARGE - MATERIAL CAN ACCUMULATE STATIC CHARGES WHICH CAN CAUSE AN INCENDIARY ELECTRIC DISCHARGE. EMPTY CONTAINERS RETAIN PRODUCT RESIDUE (LIQUID AND/OR VAPOR) AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. EMPTY DRUMS SHOULD BE COMPLETELY DRIPPED, PROPERLY BUNGED AND PROMPTLY RETURNED TO A DRUM RECONDITIONER, OR PROPERLY DISPOSED OF.

GENERAL HAZARD:

USE PROPER GROUNDING.

FLAMMABLE VAPORS MAY ACCUMULATE IN THE CONTAINER HEADSPACE ON FORMATION OF HYDROLYSIS BY-PRODUCTS. IF STORAGE CONTAINERS ARE EXPOSED TO EXCESSIVE HEAT, OVER PRESSURIZATION OF THE CONTAINERS CAN RESULT.

VAPOR IS HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR THROUGH VENTILATION SYSTEM CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASHBACK. KEEP WORK AREAS FREE OF HOT METAL SURFACES AND OTHER SOURCES OF IGNITION.

THE USE OF SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE PIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE SHOULD BE PROVIDED FOR FIRE FIGHTERS IN BUILDINGS OR CONFINED AREAS WHERE THIS PRODUCT IS STORED. STORAGE CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY IN ORDER TO PREVENT PRESSURE BUILD UP. USE WATER SPRAY TO COOL FIRE EXPOSED SURFACES AND TO PROTECT PERSONNEL. ISOLATE "FUEL" SUPPLY FROM FIRE.

AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES.

UNUSUAL FIRE AND EXPLOSION HAZARD:

FLAMMABLE LIMITS IN AIR, %

>65 C / 149 F (Octyltriethoxysilane)

SPECIFIC GRAVITY (H2O=1) 0.875

PH (AS IS) N/D

PH (1% SOLN) N/A

COLORLESS TO FALE YELLOW LIQUID WITH SLIGHT ALCOHOL ODOR

FLASH POINT (TEST METHOD) 149°F / 65°C (Closed Cup)

AUTOIGNITION TEMP: N/D

FLAMMABLE LIMITS IN AIR, % BY VOL: N/D

SECTION VI ACCIDENTAL RELEASE MEASURES

AQUATIC TOXICITY (E.G. 96 HR. TLM): DO NOT DISCHARGE THIS PRODUCT INTO PUBLIC WATERS OR WATERS UNLESS AUTHORIZED BY A NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA).

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: ELIMINATE SOURCES OF IGNITION. PREVENT ADDITIONAL DISCHARGE OF MATERIAL. IF POSSIBLE TO DO SO WITHOUT HAZARD. FOR SMALL SPILLS, IMPLEMENT CLEAN UP PROCEDURES. FOR LARGE SPILLS, IMPLEMENT CLEAN UP PROCEDURES AND, IF IN PUBLIC AREA, KEEP PUBLIC AWAY AND ADVISE AUTHORITIES. ALSO, IF THIS PRODUCT IS SUBJECT TO CERCLA REPORTING NOTIFY THE NATIONAL RESPONSE CENTER. PREVENT LIQUID FROM ENTERING SEWERS, WATERTOURS, OR LOW AREAS. CONTAIN SPILLED LIQUID WITH SAND OR EARTH. DO NOT USE COMBUSTIBLE MATERIALS SUCH AS SAWDUST. RECOVER BY PUMPING (USE AN EXPLOSION PROOF OR HAND PUMP) OR WITH A SUITABLE ABSORBENT. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE CONFORMITY TO EPA, FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS.

WATER SPILL: REMOVE FROM SURFACE BY SKIMMING OR WITH SUITABLE ABSORBENTS. IF ALLOWED BY LOCAL AUTHORITIES AND ENVIRONMENTAL AGENCIES, SINKING AND/or SUITABLE DISPERSANTS MAY BE USED IN NON-CONFED NATED WATERS. CONSULT AN EXPERT ON DISPOSAL OF RECOVERED MATERIAL AND ENSURE CONFORMITY TO EPA, FEDERAL, STATE, AND LOCAL DISPOSAL REGULATIONS.

SECTION VII HANDLING AND STORAGE

PRECAUTIONARY STATEMENTS: PERSONNEL SHOULD AVOID INHALATION OF VAPORS. PERSONAL CONTACT WITH THE PRODUCT SHOULD BE AVOIDED. SHOULD CONTACT BE MADE, REMOVE SATURATED APPAREL AND FLUSH AFFECTED BODY AREAS WITH WATER. IF SKIN OR EYES ARE IRITATED, WASH IMMEDIATELY WITH WARM WATER AND SEEK MEDICAL ATTENTION. CONTAINERS OF THIS MATERIAL MAY BE HAZARDOUS WHEN EMPTIED SINCE AREAS WITH WATER. CLOTHING MUST BE WASHED AND DRIED BEFORE REUSE. CONTACT BE MADE, REMOVE SATURATED APPAREL AND FLUSH AFFECTED BODY AREAS WITH WATER. IF SKIN OR EYES ARE IRITATED, WASH IMMEDIATELY WITH WARM WATER AND SEEK MEDICAL ATTENTION.

FARE FIRE FIGHTING: WATER MAY BE UNSUITABLE AS AN EXTINGUISHING MEDIUM BUT HELPFUL IN KEEPING ADJACENT CONTAINERS COOL. AVOID SPREADING BURNING LIQUID WITH WATER USED FOR COOLING PURPOSES. PERSONNEL SHOULD AVOID INHALATION OF VAPORS.

OTHER HANDLING AND STORAGE REQUIREMENTS: STORE AND USE IN WELL VENTILATED AREA, EQUIVALENT TO FRESH AIR. KEEP CONTAINER TIGHTLY CLOSED.

SECTION VIII EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION REQUIREMENTS: LOCAL MECHANICAL VENTILATION MAY BE SUFFICIENT TO KEEP PRODUCT VAPOR CONCENTRATIONS WITHIN SPECIFIED TIME-WEIGHTED TLV RANGES. IF LOCAL VENTILATING PROVES INADEQUATE TO MAINTAIN SAFE VAPOR CONCENTRATIONS, SUPPLEMENTAL LOCAL EXHAUST MAY BE REQUIRED. OTHER SPECIAL PRECAUTIONS SUCH AS RESPIRATORY MASKS OR ENVIRONMENTAL CONTAINMENT DEVICES MAY BE REQUIRED IN EXTREME CASES.

RESPIRATORY (SPECIFY IN DETAIL): THE USE OF RESPIRATORY PROTECTION DEPENDS ON VAPOR CONCENTRATION ABOVE THE TIME WEIGHTED TLV. USE OF OSHA APPROVED CARTRIDGE RESPIRATOR OR GAS MASK OR AIR-PACK. CARTRIDGE RESPIRATOR; HALF MASK ORGANIC VAPOR CARTRIDGE. FULL FACE ORGANIC VAPOR CARTRIDGE IF EYE PROTECTION IS NEEDED.

EYES: CHEMICAL GOGGLES AND/OR FACE SHEILD ARE RECOMMENDED TO SAFEGUARD AGAINST POTENTIAL EYE CONTACT, IRRITATION OR INJURY.

GLOVES: THE USE OF IMPERMEABLE GLOVES IS ADVISED TO PREVENT SKIN IRRITATION IN SENSITIVE INDIVIDUALS. IMPERVIOUS GLOVES, (CHEMICAL RESISTANT) SUCH AS NEOPRENE, LATEX OR PVA.

OTHER CLOTHING AND EQUIPMENT: TO PREVENT BODY CONTACT, IMPERVIOUS CLOTHING AND BOOTS ARE RECOMMENDED. IMPERVIOUS APRONS AND HELMETS (HEAD COVER) ARE RECOMMENDED WHEN WORKING WITH THIS PRODUCT. THE AVAILABILITY OF EYE WASHES AND SAFETY SHOWERS IN WORK AREAS IS RECOMMENDED.

SECTION IX PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: (760mmHg) >65 C / 149 F (Octyltriethoxysilane)

VAPOR PRESSURE: N/D

SOLUBILITY IN H2O % BY WT: N/D

EVAPORATION RATE (BuAce=1) 0.875

PH (AS IS) N/D

PH (1% SOLN) N/A

APPEARANCE AND ODOR: COLORLESS TO FALE YELLOW LIQUID WITH SLIGHT ALCOHOL ODOR

FLASH POINT (TEST METHOD) 149°F / 65°C (Closed Cup)

AUTOIGNITION TEMP: N/D

FLAMMABLE LIMITS IN AIR, % BY VOL: N/D

SECTION X STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY: THIS PRODUCT IS STABLE.

INCOMPATIBILITY: OXIDIZING MATERIAL CAN CAUSE A REACTION. WATER, MOISTURE, OR HUMID AIR CAN CAUSE HAZARDOUS VAPORS TO FORM (ETHYL ALCOHOL) BY HYDROLYSIS.

HAZARDOUS DECOMPOSITION PRODUCTS: THERMAL DECOMPOSITION IN THE PRESENCE OF AIR MAY YIELD CARBON OXIDES AND TRACES OF INCOMPLETELY BURNED CARBON COMPOUNDS. SILICON DIOXIDE. FORMALDEHYDE.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: N/A WILL NOT OCCUR

DO NOT STORE WITH INCOMPATIBLE MATERIALS. STORE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. DO NOT STORE OR CONSUME FOOD, DRINK, OR TOBACCO IN AREAS WHERE THEY MAY BECOME CONTAMINATED WITH THIS MATERIAL. KEEP AWAY FROM HIGH TEMPERATURES, OPEN FLAMES, SPARKS, SOURCES OF IGNITION, ETC. USE WITH EXPLOSION PROOF EQUIPMENT IS HIGHLY ADVISABLE.

Page 2 of 3
**SECTION XI TOXICOLOGICAL INFORMATION**

**COMPONENT TOXICOLOGY INFORMATION**

| COMPONENT TOXICOLOGY INFORMATION | TOXICOLOGY INFORMATION | PROLONGED OVEREXPOSURE TO ETHANOL HAS CAUSED HUMAN BIRTH DEFECTS. FINDINGS FROM A COMBINED REPEATED - DOSE TOXICITY STUDY WITH REPRODUCTIVE/DEVELOPMENTAL SCREENING ENDPOINTS ON OCTYLTRIETHOXYSilane HAVE SHOWN NEUROLOGICAL EFFECTS IN RATS AT HIGH DOSES (1000 mg/kg). PARALYSIS AND PARESIS OF THE LIMBS, AND DEMYELINATION OF THE BRAIN, SPINAL CORD, SCIATIC AND TUBIAL NERVES WAS NOTED IN SOME ANIMALS |

**SPECIAL HAZARD INFORMATION ON COMPONENTS**

| SPECIAL HAZARD INFORMATION ON COMPONENTS | NO KNOW APPLICABLE INFORMATION |

**SECTION XII ECOLOGICAL INFORMATION**

| ENVIRONMENTAL FATE AND DISTRIBUTION | COMPLETE INFORMATION IS NOT YET AVAILABLE |
| ENVIRONMENTAL EFFECTS | COMPLETE INFORMATION IS NOT YET AVAILABLE |
| FATE AND EFFECTS IN WAST WATER TREATMENT PLANTS | COMPLETE INFORMATION IS NOT YET AVAILABLE |

| HAZARD PARAMETERS LC50 OR EC50 | ACUTE AQUATIC TOXICITY (mg/l) | ACUTE TERRESTRIAL TOXICITY |
| <= 1 | 1 AND <= 100 | > 100 |
| <= 100 | > 1000 AND <= 2000 | > 2000 |

THIS TABLE IS ADAPTED FROM "ENVIRONMENTAL TOXICOLOGICAL AND RISK ASSESSMENT" ASTM STP 1179, p.34, 1993. THIS TABLE CAN BE USED TO CLASSIFY THE ECOTOXICITY OF THIS PRODUCT WHEN ECOTOXICITY DATA IS LISTED ABOVE. PLEASE READ THE OTHER INFORMATION PRESENTED IN THE SECTION CONCERNING THE OVERALL ECOLOGICAL SAFETY OF THIS MATERIAL.

**SECTION XIII DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:** IF POSSIBLE, PUMP TO CONTROLLED CONTAINMENT AREA. ABSORB ON CLAY OR SAND, DISPOSE OF IN COMPLIANCE WITH EPA, FEDERAL, STATE, AND LOCAL REGULATIONS. TREATMENT, TRANSPORTATION AND DISPOSAL MUST BE IN COMPLIANCE WITH EPA FEDERAL, STATE, AND LOCAL REGULATIONS UNDER THE RESOURCES CONSERVATION AND RECOVERY ACT (RCRA, 40 CFR 261). TYPICALLY CONTROLLED BURNING, INCINERATION OR APPROVED LAND FILL SITES ARE AVAILABLE.

**SECTION XIV TRANSPORTATION INFORMATION**

<table>
<thead>
<tr>
<th>Governin g Body</th>
<th>Mode</th>
<th>UN Number</th>
<th>Proper Shipping Name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
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<tr>
<td>DOT</td>
<td>GROUND (NON BULK)</td>
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<td>NON REGULATED</td>
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<td>NON-REGULATED</td>
<td>NON REGULATED</td>
<td>NA</td>
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<tr>
<td>IMDG</td>
<td>NON-REGULATED</td>
<td>NON REGULATED</td>
<td>NA</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

| MARINE POLLUTANT | THIS PRODUCT DOES NOT CONTAIN A MATERIAL ON THE MARINE POLLUTANTS TABLE (HMT 172.101 APPENDIX B) |

**SECTION XV REGULATORY INFORMATION**

| TSCA: | THE SOLVENT PORTION OF THIS PRODUCT IS LISTED ON THE TSCA INVENTORY AS A UVCB (UNKNOWN, VARIABLE COMPOSITION OR BIOLOGICAL) CHEMICAL AT CAS REGISTRY NUMBER 2943-75-1 (OCTYLTRIETHOXYSilane) |
| CERCLA: | IF THE REPORTABLE QUANTITY OF THIS PRODUCT IS ACCIDENTLY SPILLED, THE INCIDENT SUBJECT TO THE PROVISIONS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) AND MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER BY CALLING 1-800-424-8802 OR 202-426-2675. NO REPORTABLE SPILL QUANTITY (RQ) HAS BEEN ESTABLISHED FOR THIS PRODUCT (OCTYLTRIETHOXYSilane). |
| CALIFORNIA: | WARNING: This product contains chemicals known to the state of California to cause cancer or birth defects or other reproductive harm. |

**SECTION XVI OTHER INFORMATION**

| PREPARED BY | DARRYL MANUEL / PRESIDENT |
| COMPANY: | VEXCON CHEMICALS, INC. |
| ADDRESS: | 7240 STATE RD., PHILA., PA 19135 USA |

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**HMIS HAZARD RATINGS:**

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<th>KEY</th>
<th>HMIS IDENTIFICATION OF FIRE HAZARDS OF MATERIALS</th>
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<tbody>
<tr>
<td>4 -- SEVERE</td>
<td>4 -- SEVERE</td>
</tr>
<tr>
<td>3 -- SERIOUS</td>
<td>3 -- SERIOUS</td>
</tr>
<tr>
<td>2 -- MODERATE</td>
<td>2 -- MODERATE</td>
</tr>
<tr>
<td>1 -- SLIGHT</td>
<td>1 -- SLIGHT</td>
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<tr>
<td>0 -- MINIMAL</td>
<td>0 -- MINIMAL</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>CERTI-VEX PENSEAL</th>
<th>NPCA-HMIS</th>
<th>NFPA 704</th>
</tr>
</thead>
<tbody>
<tr>
<td>244-100%</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

| HEALTH | 1 | 2 -- MODERATE |
| FLAMMABILITY | 2 | 1 -- SLIGHT |
| REACTIVITY | 0 | 0 -- MINIMAL |